O. I. WILSON.

STERILIZER.

APPLICATION FILED APR. 28, 1914.

1,149,010. Patented Aug. 3, 1915.

Fig. 1.

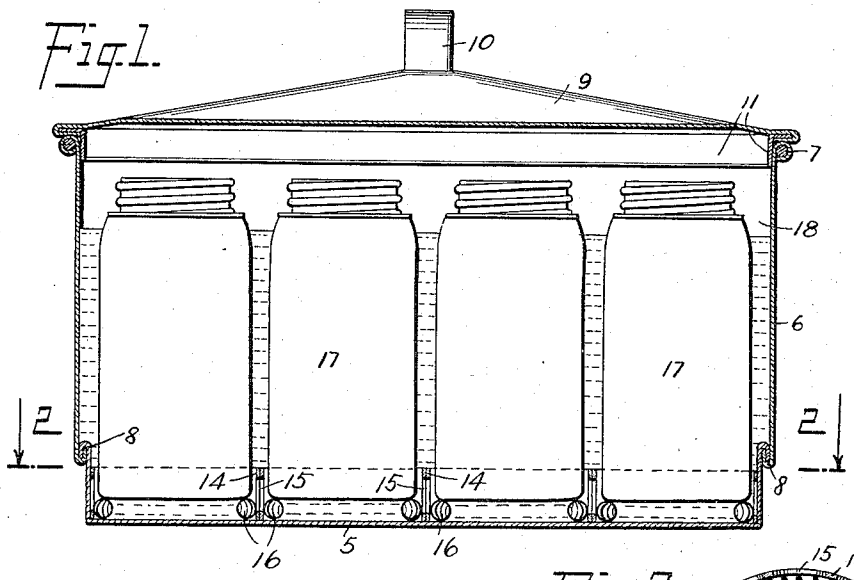


Fig. 2.

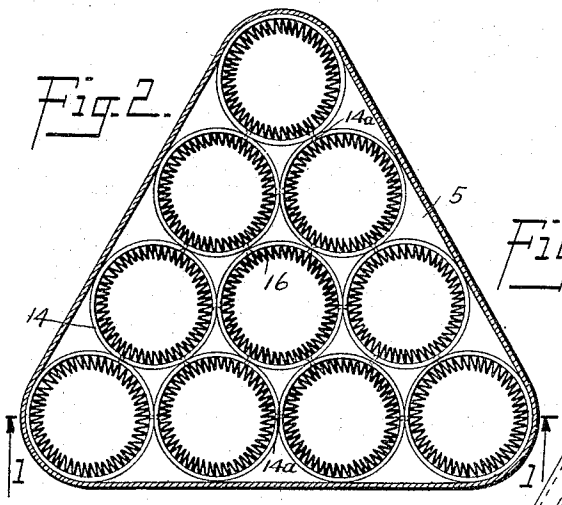


Fig. 3.

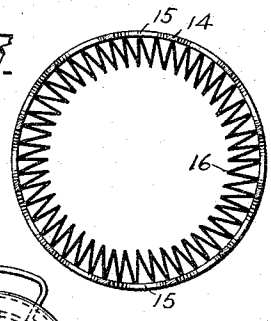
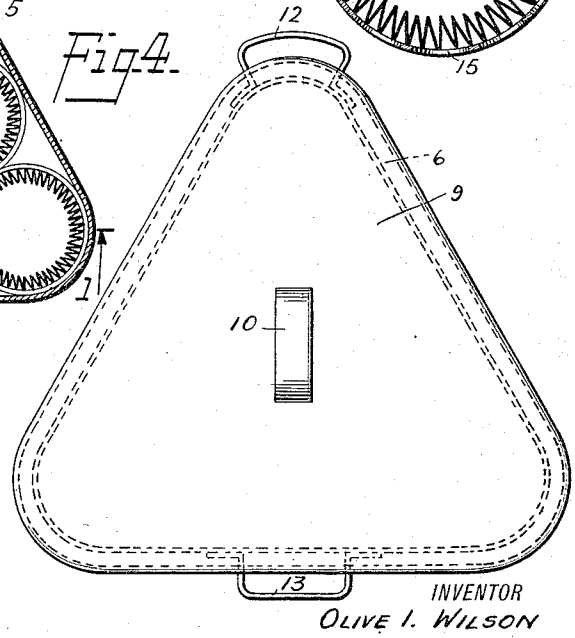


Fig. 4.



WITNESSES

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STERILIZER.

1,149,010. Specification of Letters Patent. Patented Aug. 3, 1915.

Application filed April 28, 1914. Serial No. 834,944.

To all whom it may concern:

Be it known that I, OLIVE I. WILSON, a citizen of the United States, residing at St. Edward, in the county of Boone and State of Nebraska, have invented certain new and useful Improvements in Sterilizers, of which the following is a specification.

My invention relates to sterilizers of the type employed in canning fruits and vegetables at home or at the farm.

More particularly stated, my invention contemplates a sterilizer having the form of a vat to be heated, this vat being provided with means for preventing the jars or cans employed from becoming unduly or unequally heated, in such manner as to scorch or to burn the contents.

My invention further comprehends various improvements in sterilizers, for the purpose of improving the general efficiency thereof.

Reference is made to the accompanying drawings forming a part of this specification, and in which like letters indicate like parts.

Figure 1 is a section, substantially on the line 1—1 of Fig. 2, looking in the direction of the arrow, and showing my improved sterilizer. Fig. 2 is a horizontal section, on the line 2—2 of Fig. 1, looking in the direction of the arrow. Fig. 3 is a detail view, showing in horizontal section one of the metallic rings used for spacing apart the cans or jars. Fig. 4 is a plan view of the sterilizer complete.

A copper bottom is shown at 5, and at 6 is a wall connected to the bottom 5, these parts together constituting a vat. The wall 6 at its upper edge is provided with a wire bead 7. A joint 8 connects the wall 6 with the bottom 5, as may be understood from Fig. 1. A cover is shown at 9, and is provided at its top with a handle 10. The upper portion of the cover is substantially conical, in order to facilitate the return of the water of condensation from the steam. The cover 9 is provided with a flange 11 which fits into the upper portion of the vat. Two handles 12 and 13 are mounted upon the vat in order to facilitate the handling of the latter. The vat and its cover are each of the proximate form of a triangle, the corners however being rounded, as may be understood from Figs. 2 and 4. Located within the bottom of the vat are a number of rings 14, each provided with a number of perforations 15. Thse rings are so fitted into position that they occupy a minimum of space. I find that ten rings, distributed as indicated in Fig. 2, are quite economical of space, and that when the rings are thus disposed, they are easily caused to touch each other, thereby avoiding the formation of voids of unnecessary size. The rings are secured together by rivets 14^a.

Located within each ring 14 is a spiral spring 16, the general form of which is annular, the spring by its tendency to expand clinging closely to the inner surface of the ring.

The jars, usually designated as cans, are shown at 17, and rest directly upon the annular spiral springs 16—the base of each jar extending into a ring 14.

A body of water contained within the vat is shown at 18, and is free to circulate between the cans and below the same, as the holes 15 facilitate this purpose.

The spiral springs 16 and the spacing rings 14 together constitute a mat, which not only maintains the cans in suitable spatial relation, but supports them above the bottom 5. Each can 17, by resting upon a spring 16, is effectively spaced from the bottom of the vat. Moreover, when the vat is heated, the heat is distributed somewhat near equally to the bottoms of the cans, by virtue of the conducting power of the spring 16 for heat.

With a sterilizer constructed as above described, there is no chance for the contents of the cans being heated to excess, or even to be heated unequally to any great extent.

Fruits and vegetables placed within the cans and sterilized by heating with this apparatus, are not liable to be burned.

I do not limit myself to the precise mechanism shown, as variations may be made therein without departing from the spirit of my invention, the scope of which is commensurate with my claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

1. A sterilizer comprising a vat having a substantially equilateral triangular form and provided with rounded corners, a plurality of spacing rings fitted into said vat and secured together, one of said rings being lodged in each corner, and each ring being adapted to receive the base of a receptacle the contents of which are to be

sterilized, an annular spiral spring located in each ring for yieldingly supporting the receptacle, and a cover for said vat.

2. In a sterilizer, the combination of a vat, a plurality of apertured spacing rings located within said vat and resting upon the bottom thereof, each ring being adapted to receive the base of a receptacle, and a spiral spring bent into the proximate form of a circle and located within each of said spacing rings and upon which the receptacle is adapted to rest.

3. A sterilizer comprising a vat, a plurality of apertured spacing rings located therein and secured together, and a spiral spring having the general proximate form of a circle and located within each ring, the depth of said spiral spring being less than the depth of said rings, said spacing rings and the springs located therein together forming a mat adapted to receive the bases of receptacles and yieldingly support said receptacles.

4. In a sterilizer, the combination of a vat, a plurality of rings mounted within said vat and severally provided with holes to facilitate the circulation of a liquid therethrough, said rings being secured together, and a yielding supporting member mounted within each ring for supporting a receptacle, the contents of which are to be sterilized, said rings and the supporting members therein together forming a mat adapted to receive the bases of receptacles and yieldingly support said receptacles.

5. A mat for holding a plurality of receptacles in a vat, consisting of a plurality of band-like rings apertured and secured together, the rings being adapted to rest on the bottom of the vat and each to receive the base of a receptacle, and an annular spiral spring in the lower portion of each ring, the spring being of less diameter than the width of the ring and yieldingly supporting the receptacle held in the ring.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OLIVE I. WILSON.

Witnesses:
ROBERT J. HARRIS,
JAMES S. JONES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."